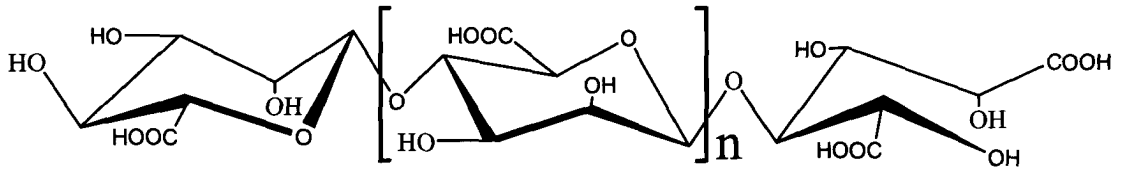
AMENDMENTS TO THE CLAIMS

Please enter the claim amendments as follows. The following Listing of Claims shall replace any prior claims listing. No new matter has been added.

Listing of Claims

1-10 (canceled)

11.(Previously presented) Alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts, wherein the alginate oligosaccharide derivatives are composed of β-D-mannuronic acid linked by 1,4 glycosidic bonds, wherein the reduced terminal in position 1 is carboxyl radical, as shown by the following formula II:



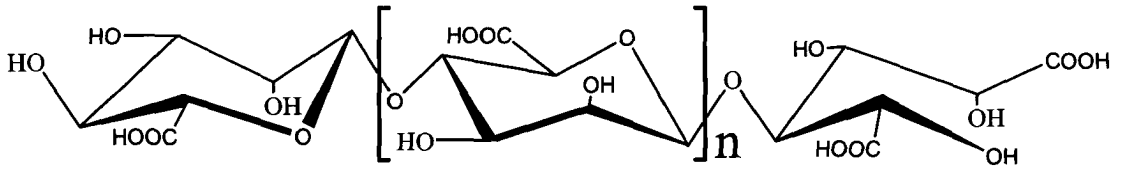
(II)

wherein, n represents 0 or an integer of 1 to 8.

12. (Previously presented) The alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts according to claim 11, wherein n is 2 to 8.

13. (Previously presented) The alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts according to claim 12, wherein n is 4 to 8.

14. (Previously presented) A process for preparing alginate oligosaccharide derivatives or their pharmaceutically-acceptable salts, wherein the alginate oligosaccharide derivatives are composed of β-D-mannuronic acid linked by 1,4 glycosidic bonds, wherein the reduced terminal in position 1 is carboxyl radical, as shown by the following formula II:



(II)

wherein, n represents 0 or an integer of 1 to 8, the process comprising the following steps in order:

acid hydrolysis step: an alginate aqueous solution is reacted for about 2 to 6 hrs in an autoclave at pH 2-6 and a temperature of about 100-120°C;

pH-adjusting step: after the acid hydrolysis reaction is stopped, the value of pH is adjusted to about 7; and

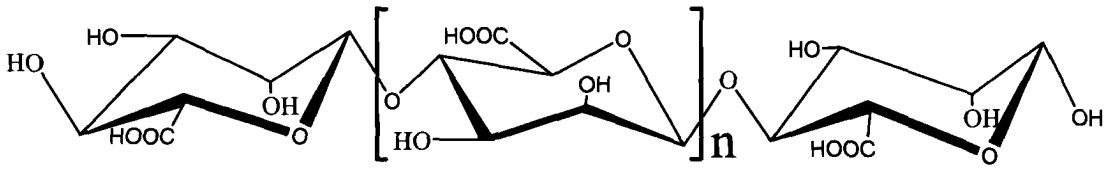
oxidative degradation step: an oxidant is added and reacted for 15 min to 2 hrs at a temperature of 100-120°C.

15. (Previously presented) The process according to claim 14, wherein said alginate is sodium alginate and the acid hydrolysis reaction is carried out for 4 hrs under the condition of pH 4 and 110°C.

16. (Previously presented) The process according to claim 14, wherein after adjusting the pH to about 7, alcohol is added to give a precipitate; the precipitate is filtered off with suction, dehydrated, dried and desalted.

17. (Previously presented) The process according to claim 14, wherein the oxidant is copper hydroxide and the oxidative degradation is performed for 30 min at a temperature of 100°C.

18. (Currently Amended) A method for the prophylaxis or treatment of Alzheimer's disease or diabetes in a subject, comprising: administering, to a subject, an ~~effective~~ amount of mannuronic acid oligosaccharide represented by the following formula I ~~to a mammal, wherein the effective amount is an amount such that the mannuronic acid oligosaccharide represented by the following formula I acts as~~ effective for inhibiting formation of at least one selected from the group consisting of [[an]] amyloid-β protein fibrils ~~forming inhibitor,~~ and [[an]] islet amyloid protein fibrils ~~forming inhibitor~~ or effective for promoting [[a]] fibrils disaggregation in the subject~~disaggregating promoter~~,



(I)

wherein, n represents 0 or an integer of 1 to 8.

19. (Previously presented) A pharmaceutical composition, comprising:

an effective amount of the mannuronic acid oligosaccharide derivatives according to claim 11 for the prophylaxis and treatment of Alzheimer's disease or for the prophylaxis and treatment of diabetes; and

pharmaceutically-acceptable carriers.

20. (Previously presented) The pharmaceutical composition according to claim 19, wherein the composition is any one selected from the group consisting of an amyloid-β protein fibrils forming inhibitor, an islet amyloid protein fibrils forming inhibitor and a fibrils disaggregating promoter.

21. (New) The method of claim 18, wherein the method is a method for the treatment of Alzheimer's disease or type 2 diabetes.

22. (New) The method of claim 18, wherein the amount is an amount effective for inhibiting amyloid-β protein fibrils formation or promoting fibrils disaggregation in a brain lesion of the subject, the brain legion being diagnostic of AD.